

Title (en)  
MIXING HOPPER

Publication  
**EP 0263996 A3 19891213 (DE)**

Application  
**EP 87113684 A 19870918**

Priority  
• DE 3635326 A 19861017  
• DE 3707880 A 19870312

Abstract (en)  
[origin: EP0263996A2] The hopper consists of an upper hopper part and a hopper neck (8). The upper hopper part is constructed in each case from a trapezoidal outer upper hopper part (3) and an inner upper hopper part (4) spaced apart to form an annular space (6). The gap between the outer upper hopper part (3) and the inner upper hopper part (4) is closed near to their upper edges. The hopper neck (8) is joined, making a seal, to the lower edge of the outer upper hopper part (3). Finally, an inlet pipe (7) for tangential charging with liquid penetrates the outer upper hopper part (3) in its upper region.

IPC 1-7  
**B01F 5/00**

IPC 8 full level  
**B01F 5/00** (2006.01); **B01F 5/24** (2006.01); **B01F 3/12** (2006.01)

CPC (source: EP)  
**B01F 23/56** (2022.01); **B01F 25/10** (2022.01); **B01F 25/85** (2022.01); **B01F 2025/913** (2022.01)

Citation (search report)  
• [X] FR 1450789 A 19660624  
• [A] US 3246883 A 19660419 - ASHBROOK CLIFFORD L  
• [A] FR 1005450 A 19520410  
• [A] FR 1146287 A 19571108  
• [A] US 4125334 A 19781114 - JONES GRAHAM S  
• [A] US 3960175 A 19760601 - LIEPE FRIEDRICH, et al  
• [A] US 4218012 A 19800819 - HAMZA HASSAN A [CA], et al  
• [A] US 1947851 A 19340220 - JEWETT JOSEPH E  
• [A] US 4125331 A 19781114 - CHISHOLM JAMES P

Cited by  
EP0908284A3; EP0419280A1; WO0056432A1

Designated contracting state (EPC)  
DE NL

DOCDB simple family (publication)  
**EP 0263996 A2 19880420; EP 0263996 A3 19891213; EP 0263996 B1 19920304;** DE 3707880 A1 19880421; DE 3777059 D1 19920409

DOCDB simple family (application)  
**EP 87113684 A 19870918;** DE 3707880 A 19870312; DE 3777059 T 19870918